COLLEGE CODE: 9133

COURSE:Internet Of Things(IoT)

PHASE I: Problem Definition and Design Thinking

PROJECT TITLE: Public transport optimization

Team Members:

M.Jothy meena
jothymeenamece2021@gmail.com

G.Pandiselvi
pandiselvigece2021@gmail.com

R.Srinithi
srinithi.rece2021@gmail.com

K.Nithyaindhuja
nithyaindhujakece2021@gmail.com

T.Pavithra
Pavithratece202122@gmail.com

Problem definition:

Begin by pinpointing the specific problems within the existinIdentifying Key Issues: Begin by pinpointing the specific problems within the existing public transport system, such as overcrowding, inefficient routes, or environmental concerns. Analyze data related to ridership, schedules, routes, and infrastructure to gain insights into the challenges faced by commuters and transportation operators. Gather input from residents, commuters, and stakeholders to understand their needs, concerns, and expectations regarding public transportation.Evaluate the environmental impact of the current transportation system, including factors like air pollution and energy consumption.Consider budget limitations and financial constraints that may affect the ability to address these problems.

Design thinking:

Empathize: Understand the needs and pain points of commuters, operators, and the community. Conduct surveys, interviews, and observations to gather insights.

Define: Clearly define the problem by synthesizing the data and feedback collected. Create a problem statement that encapsulates the main challenges.

Ideate: Brainstorm a wide range of creative solutions to address the identified problems. Encourage diverse perspectives and innovative thinking

Prototype: Develop small-scale prototypes or pilot projects to test potential solutions. This might involve implementing changes on a limited scale to evaluate their effectiveness.

Test: Collect feedback and data from the prototypes or pilot projects. Analyze the results to determine which solutions are most effective and which need refinement.

Iterate: Based on the test results, refine and improve the selected solutions. Repeat the testing and iteration process as necessary until optimal outcomes are achieved.

Implement: Once a solution is proven effective, implement it on a larger scale within the public transportation system.

Monitor: Continuously monitor the system's performance after implementation and gather feedback from users to make further improvements.

Limitations:

The project may face constraints related to budget limitations, infrastructure modifications, and potential resistance from stakeholders. Effective management and collaboration with all involved parties will be critical to overcoming these challenges.

Conclusion:

The optimization of public transportation is essential to meet the growing demands of urban mobility, reduce environmental impact, and improve the overall quality of life for its residents. This project aims to address these challenges systematically and comprehensively to create a more sustainable and efficient public transport system.